



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, CA 94105-3901

June 8, 2018

Catherine Jerrard
Program Manager/BEC
AFCEC/CIBW
706 Hangar Road
Rome, New York 13441

RE: April 13, 2018 Base Realignment and Closure (BRAC) Environmental Construction and Optimization Services 2020 Request for Information (RFI) as pertaining to Former Williams AFB, Mesa, AZ

Dear Ms. Jerrard:

EPA appreciates the opportunity to provide input to Air Force's (AF's) future contraction strategy as outlined in the above referenced RFI. Based upon past performance, we have concerns about how the proposed future contracting strategy will work at Williams AFB.

The US Department of Defense (DOD) has become increasingly reliant on the use of Performance Based Remediation (PBR) contracts in recent years, presumably to improve efficiency and cost effectiveness through a fixed price contract with insurance to cover cost overruns. PBR contracts also place the responsibility and primary decision-making authority directly on the PBR contractor, while the government assumes a diminished administrative role. However, DOD has been relying heavily upon the regulatory agencies to provide quality assurance and technical oversight to define and monitor whether government requirements are being met. This puts the regulatory agencies in a very awkward position with respect to the contract as AF assumes a diminished role.

In general, PBR contracts may work well where the extent of contamination is well characterized, technologies to be deployed are routine, and risks, uncertainties and need for contingency remedies are minimal and well defined; where work to be performed is highly predictable, and cost can be reliably estimated up front. However, as demonstrated by the outcome of the last PBR contract at Williams, they should **not** be used where extent of contamination has not been fully characterized, and where the response is technically complex, requiring innovative technologies. They are not appropriate where there is an ongoing need to be able to respond to new information and changing conditions. In these instances, the Air Force needs to retain maximum control over the response. In these instances, a PBR contract is not an appropriate vehicle to use.

At Williams, the PBR contract resulted in informal dispute at the ST12 fuels spill site. Specifically, the following issues arose as a direct result of the AF's use of a fixed price PBR

contract, due to limited ability to oversee and respond to new information and changing conditions:

- 1) The extent of contamination at the site was inadequately characterized to begin with; resulting in underestimate of cost and contract bid; and under-estimate of the size of Steam Enhanced Extraction System (SEE) needed to meet remedial action objectives.
- 2) The use of fixed price contract even with AF funded contractor self-insurance, resulted in underperformance and early termination of the SEE system before the transition criteria specified in the RDRA workplan were satisfied. In this case, the PBR contract did not have a mechanism to require the contractor to achieve the performance objectives stated in the approved RDRA workplan, and allowed the contractor to terminate and dismantle the SEE system according to the predetermined fixed price budget and schedule.
- 3) The use of a PBR contract in this instance will likely result in the need for follow on remedies at greatly increased costs to the government due to impartial application of SEE. Remedies that cost \$20 million dollars to construct should only be implemented once; and should not be operated in piecemeal fashion with multiple mobilizations and demobilizations. The construction and startup costs for thermal remedies greatly exceed the operational costs. For this reason, thermal remedies are almost always run until asymptotic mass removal to realize maximum cost-effectiveness through greatly reduced cleanup time. The 2013 Record of Decision Amendment (RODA) for the Williams ST12 Fuels Spill Site provides the expectation of achieving cleanup through enhanced biodegradation within 20 years. If the SEE system had been properly sized and run to completion, removing almost all the Light Non-Aqueous Phase (LNAPL) mass, it would be reasonable to expect the remaining dissolved phase contaminants to degrade within the 20-year timeframe specified in the RODA. However, with the current estimate of remaining LNAPL mass we estimate it to take 100 to 200 years to biodegrade. It appears that cost savings to the contractor was the primary factor determining when the system would be shut down, rather than achieving the performance objectives specified in the RDRA workplan.
- 4) The incomplete operation of the SEE system will also complicate the remedy going forward. The site has now been heated to boiling temperatures which will likely mobilize contaminants and create a new groundwater plume that AF will have to address in the future. This new concern arises directly from AF's PBR contracting strategy and should have been avoided.
- 5) The Air Force retains long term responsibility for cleanup at former bases, and that responsibility cannot and should not be delegated to contractors. It does not make good business sense to make contractors responsible for cleanup costs under a self-insurance mechanism paid for by the government, while at the same time the government indemnifies the contractor and also takes a hands-off approach to technical oversight. AF

should not presume that a PBR contractor will have always have their same long-term interests and goals in mind.

- 6) The contract vehicle should also ensure subcontractors and other vendors are compensated for their services, supplies and equipment. We are aware that a dispute arose between the prime contractor and the subcontractor that is now headed towards litigation. The current PBR contract apparently does not have a way to resolve such disputes.
- 7) The regulatory agencies found it very difficult to get technical and quality assurance comments on deliverables addressed, as evidenced by our comment letter on the Final Pilot Study Enhanced Bioremediation (EBR) Work Plan. As stated in our letter dated June 4, 2018 it is not clear that the current work plan will generate the sufficient data to enable AF to draw conclusions as to whether or not the EBR implementation will achieve the remedial action objectives (RAOs) and timeframe. The Agencies may invoke formal dispute if the current pilot test for Enhanced Bioremediation (EBR) fails to demonstrate the ability to attain the RAOs specified in the 2013 ROD Amendment.

For the reasons stated above, the next contract for Williams needs to be capable of responding to technical direction, new information or conditions, and changes mandated by dispute resolution.

Please don't hesitate to call me at (415) 972-3150 if you have questions about this letter.

Sincerely,



Carolyn d'Almeida
Remedial Project Manager

Cc: Nicole Brundige , AF
Kirsten Hawley, AF